

hip in a forty-year-old-man, in whom the x-rays showed the separation of a small piece of bone which with its attached periosteum could explain the bone formation directly about the neck of the femur, but was not sufficient to explain the extensive area of new-bone formation involving all the muscles posterior to the joint and the iliopectineus. Three months after the accident the x-rays showed a large shadow above and below the femoral neck. Ten months later most of this had disappeared. Ewald believes that the synovial fluid is responsible for the condition found. It passes between the muscle fibres and accounts for the shell-like construction of the new-bone formation, by irritation of the intestinal connective tissue in the muscle. This theory is confirmed by the frequent recurrence after too early operation, as well as the finding of cysts in the mass filled with clear amber fluid, resembling synovial fluid. Myositis ossificans develops in broad fleshy muscles lying over the wounded joint and considerably torn.

The Action of Radium on Hypertrophy of the Prostate.—The editor of the *Amer. Jour. Urology*, 1910, vi, 249, in discussing the work of Desnos on this subject, says that three distinct rays are given off by radium, and are designated as A, B, and V rays. The A rays affect the superficial tissues intensely, but penetrate only slightly. The B rays, which are far more numerous, are divided into the soft, medium, and hard, and possess an elective action on certain tissues. The V rays, which are far less numerous, have a very marked penetrating power. It is easy to filtrate the various radium rays by the interposition of metallic or other screens. The metallic screens decompose the B rays, which give rise to secondary rays. Superficial rays, only slightly irritant to the surface of penetration and acting on the deep-seated structures very slowly, necessitate a rather prolonged application. The non-metallic substances, such as rubber or thick paper, arrest the soft A and B rays, and allow the V and hard B rays to pass through. Desnos reached the prostate through the rectum and urethra, carefully protecting the mucosa by very simple instruments. In the rectum he used a large rubber tube, not perforated. A small silver cylinder containing the radium is passed into the tube and the thin wall of the tube brought into contact with the prostate. In the urethra sounds are passed, in the ends of which, under a gum varnish, is placed a piece of lead or aluminum, in the concave portion, so that the anterior portion of the urethra is protected. The urethral route is far more efficacious than the rectal. Twelve applications is the minimum, but often fifteen to twenty are necessary. The minimum interval is forty-eight hours, three or four days or sometimes longer being necessary. The indications for prostatectomy remain, the application of radium representing merely a palliative treatment. It is particularly adapted to prostates of medium size, where the hypertrophy involves the lateral lobes. Of 16 prostatitis submitted to treatment, Desnos obtained no improvement in 3, while in the 13 others an improvement or a cure was obtained, and no complication occurred during the treatment. Five times the retention completely disappeared after from twelve to fifteen applications. It occurred gradually in 2 cases, while in 3 others it suddenly disappeared within eight days, and the result has been maintained respectively eight

months, seven months, six and a half months, and four months. In none of patients was any change in the size of the prostate made appreciable by rectal examination, but a softening of the gland was almost always noted. But it is well known that in the production of retention the most important element is the increased vascular development and congestion. Generally speaking, radium possesses an influence on the congestive phenomena, and in several patients the large and intense red projections surrounding the neck of the bladder covering the prostatic projections have been seen to disappear by the aid of the cystoscope.

A Contribution to our Knowledge of Carcinoma of the Stomach.—MATTI (*Deut. Ztschr. f. Chir.*, 1910, clv, 425) makes an extensive study based upon 19 cases of carcinoma ventriculi, and one with a considerable hyperacidity and ulcer of the stomach, complicated by a peptic ulcer in the afferent loop of the jejunum, after a Y-formed gastroenterostomy according to Roux. The affected portion of mucous membrane taken for study was removed from the region of the anastomosis in some cases, while in the remaining cases it was taken from the extirpated portion of stomach. Matti studied, particularly, the relation between the gastric carcinoma and the preceding changes in the mucosa. He distinguishes five groups of cases: (1) In some cases the chronic gastritis with atrophy of the glandular parenchyma is a completely independent condition and is due to one or several of the known causes of chronic gastritis. Its presence with a simultaneously existing gastric carcinoma is only accidental. (2) In other cases the carcinoma has developed in an area of chronic, atrophic gastritis, that is, upon a degenerated mucous membrane. To this group belongs the large number of gastric carcinomas with achylia. (3) There can be no doubt that a gastric carcinoma situated at the pylorus and extensively ulcerated, through the damming back of gastric contents and the foul secretion of the ulcer, may damage the mucous membrane and produce pathological changes in the interstitial tissue as well as in the glandular parenchyma. In some cases this local cause is the most important factor in the production of the chronic changes in the mucus membrane. (4) Combination forms of the preceding types may occur. (5) A carcinoma developing upon a simple ulcer shows only insignificant changes in the gastric mucosa, and often only in the early stages. In the late stages of a carcinomatous ulcer, we may find interstitial gastritis and glandular atrophy, as in patients with chronic simple ulcer, which has led to stenosis of the pylorus. The damage to the specific glandular parenchyma, however, is less intense than in a case of "primary" gastric carcinoma. This slight effect of the tumor upon the remaining mucous membrane depends upon the morphological peculiarities of the growth. When we consider that a simple ulcer, even when it has existed for years, produces no changes in the mucous membrane, at the most only an increase of the superficial cells (the most resisting form of stomach cells), we better understand why a carcinoma originating in an ulcer is more rarely associated with any considerable changes in the mucous membrane, than a "primary" carcinoma. In gastric carcinoma, with achylia, the insufficiency of hydrochloric acid and the deficient production of enzymes, is characterized anatomically by the picture of